VIRGINIA WILDLIFE

DECEMBER 2009

FOUR DOLLARS

A River Puzzler • Grouse Necessities • Madtoms & Bullheads

Bob Duncan
Executive Director

Looking back over the year 2009, I want to express my sincere appreciation to our staff and board of directors for their hard work during a challenging period, as we—like all state agencies—felt the ripples of a forceful economic downturn. With much belt-tightening, we did accomplish many notable goals and made great headway in our efforts to secure a strong, vibrant future for this agency. We move forward with special focus on saving money, on identifying revenue from new sources, and on making the most of the sportsman's dollar.

Many of you know by now that we undertook a professional management study early in the year. Results of that review by outside experts have played a major role in our management decisions since, and have guided strategic changes put into place:

- The hiring of Chief Operating Officer Matt Koch to oversee the day-to-day administration of our offices across the state;
- An internal reorganization that resulted in a new Wildlife Resources Bureau headed up by David Whitehurst. That bureau now includes the divisions of fisheries, wildlife, and wildlife diversity;
- Implementation of the first-ever Leadership Development Program, whose initial class includes 40 fellows chosen from a pool of over 80 outstanding candidates. Their commitment to the long-term success of DGIF is evidenced by the many hours of study and problem-solving exercises they have performed—all outside of their regular work duties; and
- Renewed attention to working with our conservation partners across Virginia, in an effort to combine resources and maximize our investments—including strategic land acquisitions and transfers that protect key wildlife habitat.

Other projects also deserve mention here:

- Laurel Bed Lake—construction that involved significant repairs to the lake dam on the Clinch Mountain Wildlife Management Area. The work was necessary to maintain the 300-acre lake, which supports trophy brook trout and smallmouth bass fisheries;
- Coursey Springs Hatchery Renovation—an "extreme makeover" that will buoy trout production by 35% annually, from roughly 250,000 to about 350,000 stocked fish; and
- "Operation Dry Water"—A national law enforcement effort, conducted jointly with the Virginia Marine Resources Commission, to prevent boating under the influence (BUI).

All the while, we continue our important work in wildlife management and related, law enforcement activities across the Commonwealth.

I hope that 2010 will be a bright year for you, and I appreciate your continued support of our mission.

Mission Statement

To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; To provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation and to work diligently to safeguard the rights of the people to hunt, fish and harvest game as provided for in the Constitution of Virginia; To promote safety for persons and property in connection with boating, hunting and fishing; To provide educational outreach programs and materials that foster an awareness of and appreciation for Virginia's fish and wildlife resources, their habitats, and hunting, fishing, and boating opportunities.

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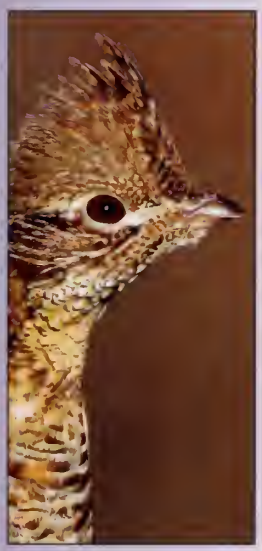

About the cover: A sought-after game bird, the ruffed grouse *(Bonasa umbellus)* has met with some challenges of late. Loss of early succession habitat and young forests–created by timber cutting–has contributed to their woes. See story on page 8.
©John R. Ford

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Mystery

story and photos
by John Ross

The why of trout streams fascinates me as much as, and sometimes more than, the fishing itself. From the 1950s into the early 1980s, the Saint Marys River held a stellar reputation for large rainbows, browns, and brook trout. Department biologists Larry Mohn and Paul Bugas report having shocked up 'bows of 14 inches and brookies to 11 or 12.

Well known, of course, are the ravages of acid rain and snow that seem to have eliminated from the Saint Marys rainbows and browns, species not as tolerant of low pH as brookies. Geology and trout go hand in hand. Yet the formation that underlies most of the river's watershed—Antietam quartzite—offers as much acid buffering as a glass cruet provides for vinegar. So why, for a generation or so, did the Saint Marys blossom into such a famous fishery?

To help unravel the mystery, I tracked down Michael Upchurch, a recently retired member of the state geological survey. Late last November he rendezvoused with Dawn Kirk, fisheries biologist with the U.S. Forest Service, and me in the parking lot at the foot of the trail leading up the creek. It's so narrow in late fall that I can't, for the life of me, think of it as a river.

How long, I asked Michael, had the Saint Marys drained this valley on the western shoulder of the Blue Ridge? He opined that he wasn't really sure, but probably somewhere between 10 million and 30 million years.

I made reference to accepted wisdom that the Appalachians were once as high as the Alps. Michael said he didn't think so. The difference in

of the Saint Marys

elevation between where we stood on the valley floor and the crest of the ancestral Blue Ridge would probably be similar to what we saw that late fall morning.

Tempting though it is to believe that our mountains were taller than the Rockies when thrust up as continental drift crushed North America and Africa together roughly 300 million years ago, the grinding collision occurred at an imperceptible speed. As the new mountain chain was rising, its rocks were being eaten away oh-so-slowly by rain and freeze and thaw just as they are today.

What's left is mainly Antietam. This hard rock was named by a geologist who identified its outcrops along the creek that flows through the battlefield in Maryland. He must have been a Yankee. Blue coats named their battles after streams; the men in butternut preferred places where people lived. A Confederate would have called the rock Sharpsburg after the town nearest the bloodiest single day's fight in the Civil War.

Whatever its politics, the rock was deposited some 600 million years ago in a shallow sea as a fine, clean sand into which *Skolithus linearis*, a saltwater worm, drilled vertical burrows. Their fossil tubes are plentiful in rocks along the river.

The Saint Marys follows along a minor fault, which is plainly visible where the river runs hard against its south bank just below the lower falls about two miles up the trail. The geologic structure creates deep pools in the gorge. That's one of the reasons, Dawn maintained, why the stream is capable of nurturing big trout.

Examining the character of a once prolific trout stream.

Above: Geologist Mike Upchurch shows U.S. Forest Service fisheries biologist Dawn Kirk the fault in the rocks which determines the path of the Saint Marys. Below: Though small, brook trout are the most resilient of Virginia's trout and are the state's native fish.

St. Marys River

to coalesce into tough black nodules of ore, some as big as basketballs. The ore fed, in the early 1800s, a trio of furnaces near the hamlet of Vesuvius, so called by Italian ironworkers because fountains of sparks spewing upwards from the smelters reminded them of volcanoes back home. Good Catholics were these mongers, and it is likely that they named the river after their blessed saint.

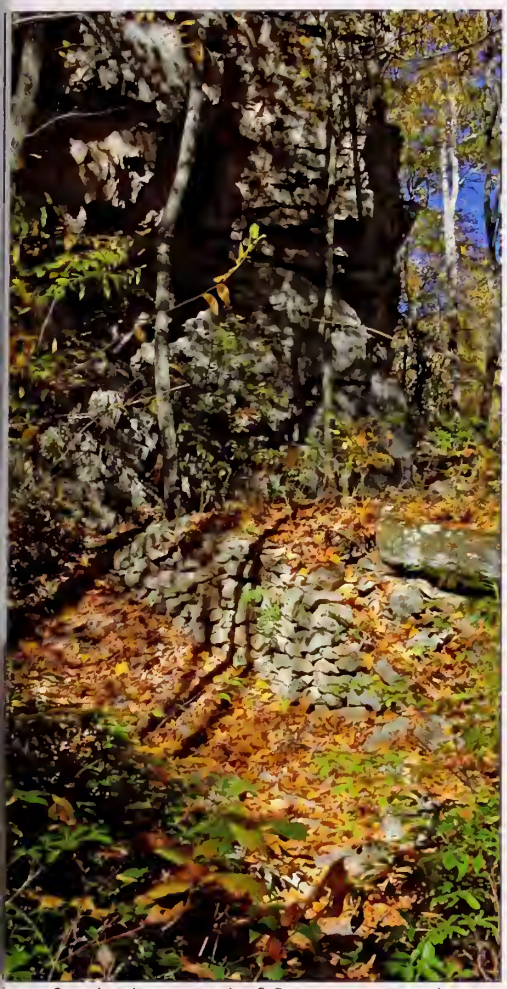
Michael wanted to have a look at the iron mines, so we chose the south path where the Saint Marys' trail forks. Up along Sugartree Branch we hiked, marveling at the gorgeous plunge pools that we knew held brook trout, though they were well

So habitat was plentiful, but why, with its almost sterile bedrock, does the Saint Marys produce abundant caddis, stoneflies, mayflies, and the minnows that eat them—all diet for trout? Dawn's answer: These insects thrive in clear, cold water, with beds free of choking sediments in watersheds where soils buffer precipitation enough to keep acidity within an acceptable range.

I, with my ancient, freshman geology class, assumed that the lens of Shady dolostone from which iron was mined on the plateau to the south of the river was responsible for the buffering. After all, dolostone is a kissing cousin to limestone, from which trout-rich spring creeks flow. This once thick lens of carbonate rock had been weathered into a deep bed of clay. Rain, percolating down through the clay, neutralized acid precipitation and fed into the Saint Marys, allowing trout to thrive. At least, that's what I thought.

Weathering of the Shady also allowed iron and manganese minerals

Above: Round nodules of iron ore litter the trail from Sugartree to the Pulaski Mine. Below: Tubes that saltwater worms burrowed into fine beach sands 600 million years ago are easily seen in the Saint Marys bedrock.



On the lower end of Sugartree, neatly laid stone marks foundations of the flume that carried ore from Pulaski Mine to the rail siding along the Saint Marys.

camouflaged by the mat of sodden leaves carpeting the bed of the stream.

Skipping across Sugartree on rocks flat as paving stones, we began the trek up to the mine. Angular blocks of Antietam gnawed the soles of our boots. Ten minutes later, Michael stopped and scuffed the trail with his toe. The path had smoothed, and the dirt was brown and pebbly. We'd just climbed up onto the Shady formation, he said. We'd gained 200 feet in elevation and covered maybe 20 million years in geologic time.

"Should be a mine near here," he said. And with that, he headed off the trail through a tangle of scrubby leafless oak, laurel, and greenbrier and into a deep gash in the mountain's side. Dawn and I scampered to keep up. We found him standing stock still, head cocked.

"I can hear voices, men calling to each other and the sounds of machinery," he said. I heard them too: creaking gears of steam shovels clawing into the ore-laden clay banks and the rumbling crash when they dropped their loads into waiting trucks.

Twenty minutes further brought us up onto the plateau next to a tipple where ore was screened and washed and fed into the 2,200-foot flume that sluiced it down the mountain to gondolas waiting on the narrow gauge rail line by the Saint Marys. To the north spread the flat dry tailings pond, now favored by hunters who camp. By the eve of World War II, mining was all but finished here. Following the route of the flume, we headed back down to the Saint Marys.

Over the next few days, the why of the Saint Marys tugged at me. Restocked with rainbows and browns in 1936, the river had gained prominence among anglers by the late 1960s. Thirty years later, research by Dan Downey, Mark Hudy, Larry Mohn, and Paul Bugas confirmed that the river's famed rainbows and browns were gone and only one class year of brook trout, Virginia's state fish, remained. Why had it become a great trout stream in the first place? That's what I wanted to know.

Why had it become a great trout stream in the first place? That's what I wanted to know.

Rick Webb, hydrologist with the Virginia Trout Stream Sensitivity Study, had the answer. Thin beds of soil weathered from basalt, shales, and sandstones cap the south rim of the Saint Marys watershed. The soils initially contained enough alkalinity to neutralize the onslaught of acid rain. Though they had been in place for millennia, in only 50 years—less than a flicker of the geologic eye—their acid neutralizing capacity was exhausted.

With funding from several state and federal agencies and from energy company Dominion, dumping of limestone sands by helicopter into headwater tributaries in 1999 instantly reduced acidification of the Saint Marys and initiated an immediate rebound in brook trout populations. The river was limed again in 2005.

Despite this assist, life in the Saint Marys is a tough swim even for brookies, the hardiest of wild trout. The fishing is good, but not nearly as great as it once was.

Along with acid deposition, the last 50 years have not been kind to fish. Camille dumped 22 inches of rain overnight in August, 1969. Agnes hit in 1972. Fran struck in 1996. Isabel roared through in 2003.

With each hurricane, these lovely rivulets—across which Mike, Dawn, and I hopped that November afternoon—rage deep, combine with furious force, and blast through the river's gorge in a tumult that cannot be imagined. Boulders crash into each other, rumbling downstream like runaway ore trains. The river bottom is scoured hound-tooth clean. Yet somehow brookies survive. □

Former chair of the Virginia Council of Trout Unlimited, John Ross is a writer living in Upperville. His most recent book is Rivers of Restoration *(Skyhorse Publishing, 2008).*

Right: Dropped from a hopper swinging beneath a helicopter, limestone sands mitigated acid rain and restored wild brookies to the river.

Improving the Hun

Sportsmen and landowners work together to create wildlife-friendly habitat.

by Bruce Ingram

I never pursued grouse until '88, so I have no first-hand experience with what some Virginians believe was the 'golden age' of upland birding when two, three, or more flushes per hour and full game bags were common. But in the late 1980s and early 1990s when I prowled the mountains of Botetourt, Craig, and Roanoke counties for ruffs—most of the time, without a dog—I often flushed a bird or two per hour and, even with my slow reflexes and lackluster wingshooting skills, would take one home every now and again.

To demonstrate how poor the pastime has become, Eagle Rock farmer Jack Leffel and I hosted Rick Busch, assistant director of the wildlife division, and Dennis LaBare, an upland bird advocate from Upper Tract, West Virginia, for a Botetourt outing this past January. And when at the end of the day our total tally was three flushes, one shot taken, and one bird killed by LaBare, Jack and I were relieved that the action had been as *good* as that. We had feared worse, based on previous excursions.

So, then, what is being done and what can we all do to make grouse hunting better on state and national forests and private lands across the Old Dominion?

"We like to think that on our state wildlife management areas (WMAs), we are active in the forest management kind of rotation that we ought to be practicing," says Busch. "Annually, we are cutting and manipulating and cultivating about 350 acres out of the 200,000 acres we own, but we would like to be doing at least twice that much.

"Annually, we also practice prescribed burning on about 1,000 acres of open land and at about the same rate in our forests. And the Department (DGIF) maintains another 1,000 acres or so in various kinds of openings, whether they be from farming or from plantings of native warm season grasses, for example."

Busch adds that the DGIF is trying to shift away from intensive farming on its WMAs, practicing less cultivation of

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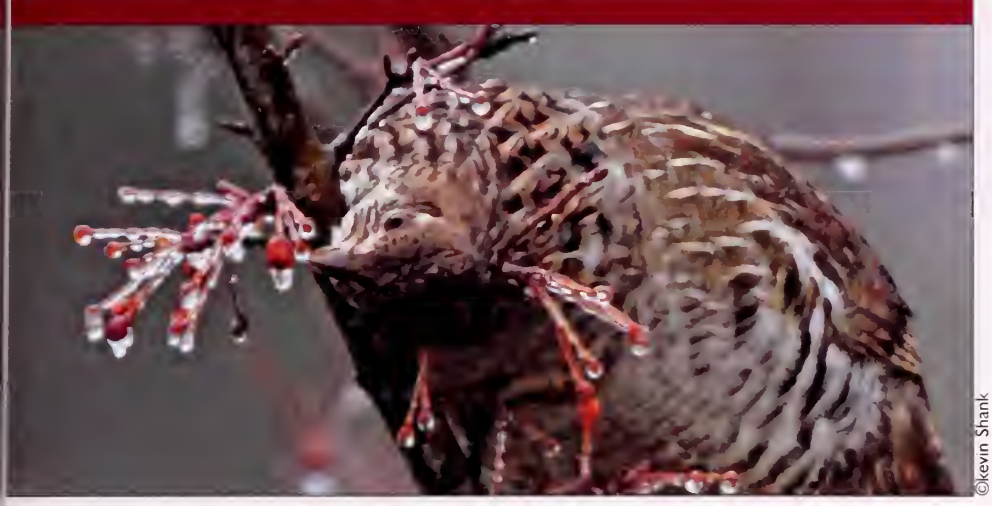

©Kevin Shank

row crops and more disking and prescribed burns. The goal always is to maintain or increase habitat diversity. Interestingly, the Department has some very intriguing, future goals.

"We would like to be able to demonstrate certain kinds of habitat culture, especially for quail, on our WMAs," continues Busch. "I envision some kind of extension-service-style outreach so that on organized visits, private landowners could come to our WMAs and see how they could copy what we are doing.

"On our western management areas, most of our work is designed to create several stages of forest diversity. We haven't had the opportunity to go into educational outreach with landowners. I would like to see a program where landowners come to a western WMA and actually see us in the process of habitat improvement. Anything we or a landowner would do to benefit grouse and quail will help a vast number of game and nongame animals."

"Anything we or a landowner would do to benefit grouse and quail will help a vast number of game and nongame animals."

—Rick Busch

One-on-One Efforts

Busch wants landowners to know that all district biologists stand willing to work one-on-one with them, which he emphasizes is a primary job of the staff and "still fifty percent" of what they do. Whether it is efforts like the Deer Management Assistance Program or improving habitat for deer, turkeys, grouse, quail, or songbirds, state biologists are all well versed.

Ruffed grouse, of course, have some specific requirements.

©John Ford

t for Grouse

©Bruce Ingram

©Bruce Ingram

This regenerating clearcut on the author's Craig County land will soon provide quality grouse habitat.

"As we all know, grouse depend on a young aged forest," says Busch. "They do best when a forest is between five and 30 years old, but they need more than just timber harvesting; good cover for nesting, protected overhead cover for broods, overgrown fence rows, and weedy-seedy places, for example. Timber cutting helps provide many of these needs.

"One of the things that will always make improving grouse numbers in Virginia more difficult, as opposed to northern states, is that our state will always have to experience ideal conditions just to have a good population. That fact, plus poor hatches in 2005 and 2006 and the recent droughts that reduced the amount of protein—or bugs—available, and it's no wonder that Virginia's grouse population has come under stress."

Jack Leffel sees another problem in that the percent of grouse habitat we have left is so much less than what formerly existed. Rick Busch agrees.

"The ruffed grouse has become marginalized in many places," Busch explains. "Just creating the right habitat alone is not enough … there have to be grouse around to move into that habitat, and sometimes there aren't any."

Grouse in National Forests

The George Washington and Jefferson National Forest encompasses some 1.7 million acres in the commonwealth. In the past, this public land became a bastion for state fool hen fanciers, but unfortunately, because of the misguided efforts of extremists who demand that *no* timber cutting take place on this public land, bird populations from grouse to towhees and from warblers to sparrows have plummeted.

"If this trend of not managing the national forest continues, then in about 40 years a major portion of the trees will die at the same time," says Busch. "That means, since many of the trees dying will be red oaks, that about 90 percent of the hard mast will also disappear and will be gone for about 40 to 50 years. Timber cutting will have to be done on a major scale to thwart this scenario.

"The public needs to be educated on the effects of no timber management, and the fact that national forest personnel have been hamstrung. One of the objectives for the national forest should be to have a healthy, diverse forest with sound management—and that is not the case today."

©Bruce Ingram

Rick Busch (R) and Dennis LaBare admire a grouse that the latter shot during the hunt.

Regardless of where grouse live on federal, state, or private land in Virginia, the effect of hunting on this game bird appears to be minimal, asserts biologist Gary Norman, who monitors the state's grouse population.

"The main thing that I would add is the conclusion reached from the Appalachian Cooperative Grouse Research Project that grouse hunting appears to be compensatory, and that sport hunting, at current harvest levels, does *not* appear to be limiting grouse populations in the region," emphasizes Norman.

Where Do We Go From Here?

I have heard much misinformation about why Virginia's grouse numbers have drastically declined, from the absurd—that wild turkeys are eating grouse eggs (turkeys don't even know what a grouse egg looks like)—to the ridiculous, that coyotes are eating all the grouse. (In reality, they prey mostly on creatures such as groundhogs, mice, and rabbits).

The truth is that for grouse numbers to improve, state sportsmen and rural landowners will have to work together to improve and create grouse and wildlife-friendly habitat. For his part, Dennis LaBare continues to lobby to have more timber cutting and habitat manipulation in our national forests. And Jack Leffel has labored to develop native warm season grasses, such as switchgrass, on his Botetourt land.

On my 287-acre tract of land in Craig County, I created linear clearcuts of 3.6 and 6.5 acres in 2004 and another 11 acres in 2005. In another few years, I hope to hunt ruffs on those regenerating stands. I also plan to conduct a 15-acre cut in a few years. Only after efforts such as these, by many throughout Virginia, will grouse numbers improve.

Bruce Ingram has authored many guide books, most recently Fly and Spin Fishing for River Smallmouths *($19.25). Contact him at be_ingram@juno.com for more information.*

©Kevin Shank

Celebrating the Art

©Wayne Fowlkes

©Beth Hester

Custom rods for any occasion and any weight have captured the attention of anglers far and wide.

"When you work with your hands, you are a laborer. When you work with your hands and mind, you are a craftsperson. But when you work with your hands and mind, heart and soul… you are an artist."

–Author unknown

essay by Beth Hester

For over 55 years, Norfolk native Wayne Fowlkes has been constructing high-end fishing rods for both fresh and saltwater. Technically, his rods are top-notch, but what elevates them to an altogether higher level, is the meticulous threadwork that transforms those rods into works of sporting art.

Though many local and national celebrities like Loretta Lynn and Curtis Strange own or have commissioned his rods, Wayne laughs and fondly remembers the first, unassuming rod he ever built: "I was 14 years old, and made myself a surf rod using a length of Calcutta bamboo. The reel was held onto the butt section by two radiator hose clamps. I just had a passion for fishing, but none of us really had any money back then, so we'd try to do the best we could with whatever materials we could scrounge up… I think the whole rig cost about two dollars."

Wayne works his magic from inside a Virginia Beach workshop, which is loaded with blanks of all sizes in various stages of construction. The shop is a fishing lair of sorts, crammed floor to rafters with fishing memorabilia, antique reels, old photographs, fish replicas, tools and tackle, bobbins filled with thread, and framed covers of the Gudebrod company catalogs which, since 1982, have been graced with examples of his innovative custom threadwork.

Wayne explains. "David Lagrand saw examples of some of my work in a tackle shop, and made inquiries. Gudebrod liked my work so much that they began to use my butt wraps and thread designs to showcase what could be achieved artistically with their various products.

Wayne continues, "My alliance with Gudebrod and other component manufacturers is helpful to the craft. It's a lot of fun to see what kinds of dyes and threads the manufacturers will come up with, and to integrate some of those materials into my design plans. I get a big kick out of a new design that turns out even better than I'd expected, and I feel very fortunate that I have the ability to visualize what a specific pattern will look like on the finished rod."

# of Custom Rods

©Wayne Fowlkes

©Beth Hester

A masterful artist, Wayne Fowlkes produces 350–400 custom rods a year.

Wayne is known for his signature black and gold wrap combinations, a color mix he says holds up well under harsh conditions. He is especially proud of the Fishnet design he developed, as well as a special design he calls The Predator, which is a succession of gold, diamond-shaped fish, chasing after smaller bait fish. Other patterns include a St. John's Cross, with a star radiating from the center, a series of Native American thunderbirds emerging from red flames, and themes employing bright, holographic thread. Wayne will build custom rods for any occasion and recently completed a rod for a Virginia Tech graduate, complete with university logo and colors.

In any given year, Wayne builds 350 to 400 custom rods, filling commissions from individual clients and large orders from local charter boat fleets. Wayne's rods are candy-apple delicious, sporting deep, lacquer-like finish coats. He can build heavy-duty heavers and boat rods, or delicate fly rods capable of casting a Murray's *Mr. Rapidan Special* to a hungry bass or trout. Despite such a heavy workload, Wayne manages to display a refreshingly ironic sense of humor. Describing a custom rod built for President George Bush, Sr., Wayne says, "I knew the president was expanding his fishing repertoire, and well…it just didn't seem *politically correct* for him to be trying to use a bass rod for bluefish." □

Beth Hester is a writer and freelance photographer from Portsmouth. Her passions include reading, shooting, kayaking, fishing, tying saltwater flies, and tending her herb garden.

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Fishing with a Passion

by Virginia Shepherd

"Fishing keeps me focused. It keeps me from becoming complacent. It's something I love as much as life itself."

–Stephen Miklandric

In 1986, 19-year-old Stephen Miklandric caught his first citation fish on the James River. It was a 20-inch smallmouth bass weighing 4 lbs. 4 oz. It would take him three more years—more than 150 weekends of fishing—before he caught his second trophy. Today, more than 20 years later, the 43-year-old Miklandric has earned his place as one of Virginia's finest anglers.

Last year, he broke all records for catching trophy fish in Virginia, landing 148 citations in 14 species and earning the title of Angler of the Year. He joined the small circle of anglers who have attained Level 3 Master Angler status, and is but one species away from reaching the final Level IV Master Angler, a title which recognizes anglers skilled enough to catch a trophy fish of virtually every species of game fish in Virginia.

Not only can Miklandric catch trophy fish, he can catch them consistently. He has been recognized by the Department as an Expert Angler in sunfish, largemouth bass, yellow perch, chain pickerel, crappie, longnosed gar, rainbow trout, brook trout, blue catfish, and channel catfish. Furthermore, Miklandric holds twelve Virginia Angler of the Month titles comprised of nine different fish species.

Nevertheless, Miklandric is not one to take his angling achievements for granted. "Lady Luck and Mother Nature have to sign off on every single trophy," he says. "No matter how good you get."

But come on, now. How *does* he do it?

"People who become good at fishing are people who *want* to become good at fishing," says Miklandric. "Because, fishing is a hard teacher. If someone's goal is just to catch citations, they're probably not going to remain fishing very long. Fishing is very, very brutal and unforgiving in the beginning. But when it starts to give back, it's exponential. Only after you have five or six years of experience on a lake or a stream and you're able to compare five different Februarys, Mays, and Octobers can you

Shown here, citation winners from the Virginia Angler Recognition Program.

photos ©Marc McGlade

"Remember, just because you see fish on your fish finder doesn't mean they're hungry. It doesn't mean they're eating. After all, we're not eating every second of the day. Neither are the fish."

©Marc McGlade

Stephen Miklandric with citation striped bass.

begin to weed out what doesn't work and remember what does work. Citations come through doing the right things that you've learned from experience and from other fishermen. It comes from doing it, and doing it, and doing it. That's all there is to it. That's really the way it works."

Simple, huh? Well, not really. The bottom line is that Miklandric believes the difference between a good angler and a great angler is perseverance—years of it—along with an obsessive attention to detail. For 12 years, Miklandric has carried along a video camera on his fishing trips as his fishing log, recording every small detail of the fishing day. "Fish leave clues," he says. "Someone will tell me, 'Oh, I was fishing for bass but caught this bowfin by accident.' I'll say, 'No. You didn't. There was a reason why that bowfin was there and there was a reason he took your bait. Now figure it out.'"

Miklandric says the details are even more important the minute you land a trophy fish. "When you get a citation of any species, you have to *stop* and remember and record in your mind *exactly* what you did and where you were if you want to repeat it. But it's a hard thing to do when the adrenaline is pumping through you. It's easy to get so caught up in the fish that you forget what you did to catch it."

photos ©Marc McGlade

Stephen Miklandric with citation walleye. Stephen Miklandric

Virginia Angler Recognition Program

"I think the program's fantastic. I know what it's meant to me over the years. It's a place where you can get recognized for fishing, and there aren't many places where you can do that either as a kid or as an adult. It brings everyone together."

–Stephen Miklandric

Virginians catch and record an average of 6,000 trophy-size freshwater fish annually. DGIF recognizes their accomplishments in a variety of ways, including Trophy Freshwater Fish Awards, Master Angler Awards, Expert Angler Awards, and Angler of the Month and Year Awards. Go to www.dgif.virginia.gov/fishing/varp for more information.

Which details does Miklandric find important? *Everything.* From time of year to water depth, to cloud cover, to the difference between an 8-inch and a 4-inch worm, Miklandric finds no detail insignificant. He has found that the details recorded from years of fishing a body of water yield patterns which are the keys to cracking the codes on really big fish.

"Fish are very much creatures of habit," he says. "So I cycle through the calendar year gathering information and applying it to the next season."

But even if you've cracked the codes on the big fish and you've got years of experience under your belt, there are no guarantees. "Sometimes fish don't bite and you don't know why. That's just the way it is. But I've found that more times than not, they *do* bite when they're supposed to, if you know what you're doing."

Miklandric admits that to be a trophy angler requires a passion that will carry you through the inevitable disappointing days. Even today, there are days (not many) when Miklandric himself has been known to get skunked. But when Miklandric pulls into a boat ramp on the Suffolk Lakes and backs his trailer into the water and he's looking into his rear-view mirror, something happens. At the moment when the boat separates from the trailer and begins to drift away, he says, "The lake takes me over. There is no trace in my mind or in my heart or in my soul or in my spirit of any of the worries I carried with me that day. I forget who I am. Then I look at my graph and try to figure things out. I know who lives here. Now, let's go knock on some doors." □

Virginia Shepherd is a former editor of Virginia Wildlife. *She has been a freelance writer for the past 12 years*

"If it swims, I'll try to catch it."

Trophy Blue Cats in the Lower James: The Original Couch Potatoes

"Big blue cats will sit in the same hole for three months or more out of the year, and they're huge because they're old and smart. They face downriver when the tide is coming in and gobble up as many shad as they can until they're bursting at the seams. Then the tide will stop and they'll sit there and go 'Ah, that was good. I'm not eatin' nuthin'. I don't care what you throw at me.' "

Gotta love 'em: Carp and Gar at Lake Western Branch

"I love carp. They are strong and such ferocious fighters. They are like bulldogs. What's not to like about them? Maybe they're not all that pretty, but if you've ever seen a long-nosed gar, they're not either. Some of my fishing friends tease me for fishing for them. They say 'Oh, you're fishing for trash fish.' I say there's no such thing as a trash fish. They all have their place of respect with me."

Monster Largemouth Bass

"There are two types of largemouth bass: those 5 lbs. and less and those more than 5 lbs. And they act like two totally different fish. They differ in how they eat and in how aggressive they are. For example, if you fish around the shoreline at Briery Creek Lake in Prince Edward County, you can catch all the 12- to 14-inch bass you want on a 2-inch rapala or spinner. But the big largemouth bass are out on the main lake points and they're eating *big* bait. That's because the big bass are big-time lazy. And they're smart. They know. They've taken every bait known to man and they're tired of it. Big bass would prefer to chase down a big giant shad, swallow it whole and not have to eat for 8 hours. So, I go fishing for big bass at Briery in mid-February. I fish deep and know that I'll only get 3 or 4 strikes the entire day from sunup to sundown and probably only land two fish. However, those two fish stand a very good chance of being truly huge."

Trophy Trout

"Trout can be really finicky. You can sit there and watch them, and throw everything in the world at 'em without a bite. Then, when they decide to eat, it's like 'What did I do?' I didn't do *anything*. The reason anyone catches a big, giant trout is because that trout *felt* like eating. There is no major skill; no black magic about it."

Mothers & Daught

Tapping into the magic of outc

"I really believe being in nature provides a sense of creativity and well-being. There's something primal about knowing you can take care of yourself. I want to give those things to my daughter."

–Beth Nease

Above: Learning how to kayak safely makes sense. Learning with friends and family makes it special.
Right: Survival classes are important and popular.

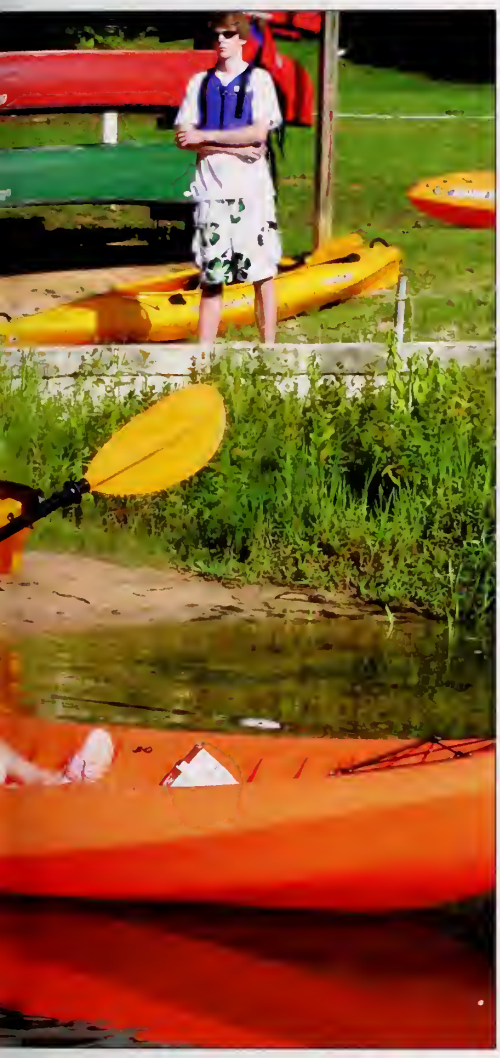
story and photos
by Gail Brown

Long before the decorations came out, the lights were untangled, and the tree was put up, young Judith Quinn began planning her mother's Christmas surprise—a photo album of their time together at the Department's *Mother & Daughter Outdoors* weekend. The album is Judith's effort to capture, through photos, the adventures they shared kayaking, fishing, shooting, and hiking as they challenged themselves and each other to master basic survival skills. Today the album sits proudly on Brenda Quinn's dresser, not really noticed in each day's confusion, but sure to be missed if removed from sight. It is, Brenda says, the best gift she has ever received.

Although new photos will be shared around the holiday table this December, it won't be until August of 2010 that the Quinns will again travel to the Holiday Lake 4-H Center in Appomattox County for their 4th (and the Department's 10th) *Mother & Daughter Outdoors* weekend. Most of the friends they have made over the years will be there, too —several returning as instructors—and while some classes will change, many favorites will remain. And that's a good thing, as Judith is counting down the

ers Bond Outdoors

or experiences



Focus! Instructor Jesse Ebron uses pushpins in the target to teach participants to "look at the smallest part you can see."

few remaining years until she turns 16 and can finally take the class she's been waiting for: how to maneuver an ATV! Judith's "camp friend," Amber Nease, will have grandmother Val and mother Beth there to help cheer them on when the girls take some time from the high ropes, 3-D archery, and shotgun to learn how to safely negotiate turns and take their ATV over obstacles.

Beth Nease is one of the many attendees to come to the *Mother & Daughter Outdoors* weekend after first attending the Department's *Becoming an Outdoors Woman in Virginia (BOW)*, a precursor and model for the mother and daughter program. While many states have programs for women over 18, a weekend dedicated to promoting mother and daughter outdoor experiences for those 9 years and older remains uniquely Virginian. It is also one of the most popular programs the Department provides, with attendance growing each year faster than kids can drop their backpacks and yell, "Ready!"

"The popularity of the program is no surprise, as it tapped into a previously underserved population of hunters and wildlife enthusiasts," states Jimmy Mootz, DGIF outreach coordinator. Like the BOW program, the *Mother & Daughter Outdoors* event provides women, even those with little or no experience, an opportunity to learn outdoor skills and meet others with similar interests. Activities center on hunting, fishing, boating, and wildlife watching, the four cornerstones of all DGIF educational programs. Karen Holson, outdoor education supervisor, who's overseen

the program since 2001, adds, "This weekend is geared toward kids learning to be in the outdoors and to be safe. It provides an opportunity for the moms and daughters to spend quality time learning together."

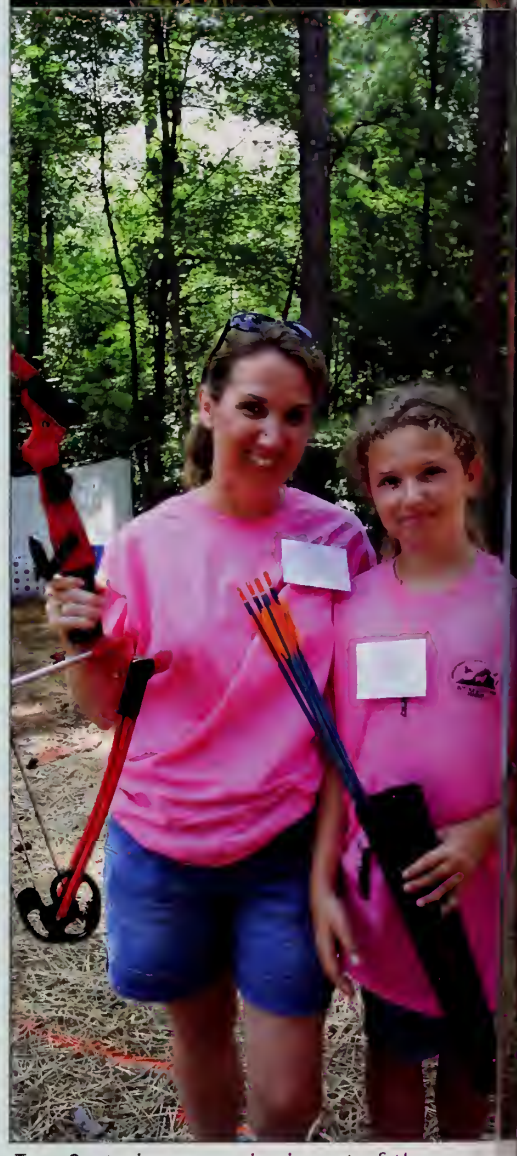
The moms agree. One mom signed up this past August because, when she read the DGIF flyer her daughter brought home from a Girl Scout meeting, she thought it would be fun for them to do the activities together. Joanna Dunevant, participant turned volunteer instructor, began her wildlife experiences at a BOW weekend she attended after her husband suggested she might enjoy it. She gravitated to the mother and daughter weekend when she wanted to share her newly found skills and interests with her niece. While there are many different reasons for attending, all seem to find what they come looking for—and more. Mothers who seek an opportunity to get closer with their daughters are not disappointed.

Daughters looking for friendship or fun find both. And while everyone arrives suspecting good times will be the constant, the more subtle benefits soon become obvious to campers and educators alike: When women master survival skills and challenges set before them, a sense of self-esteem and empowerment is realized.

Long-time volunteer and archery instructor Jesse Ebron believes there are many benefits for all involved in the program. "What's amazing," says Ebron, "is the bond you see develop… and the light that comes on when participants experience success at something they didn't think they could do. The moms seem to get their form down first, but then the kids get better faster. Things become a little competitive and that makes it fun. That's when you see that bond develop. They learn to trust their instincts."

Nease, who returned this year as an instructor apprentice, agrees, adding, "No one wants to get beat by a 14-year-old! I try harder because it's competitive and fun. But one day Amber will beat me and she'll know she won. Even now she's routinely 'picking up my trash.'" Nease continues on a more serious note, stating, "I really believe being in nature provides a sense of creativity and well-

When you learn to make a fire, you learn to take care of yourself. When you celebrate new skills, you do so loudly together!



Top: Capturing memories is part of the camp experience.
Above: Those smiles tell it all!

Above: Experiences at camp allow you to set and conquer goals.
Left: "Look at her go! If she can do it, I can, too!"

being. There's something primal about knowing you can take care of yourself. I want to give those things to my daughter."

That seems to be the consensus at camp. While the Virginia Reel dance is fun, the food great, and the chance to make new friends appreciated, it is the belief that you can master "what comes your way" that emerges as the most powerful force experienced and shared by both mother and daughter. It's a gift not easily captured by the camera, but it is there nonetheless.

This Christmas when the album comes out and new pictures appear, Brenda and Judith will share their plans for their next special weekend together. Other moms, daughters, grandmas, and aunts will do the same. Perhaps one of them will again capture that elusive look of love that says: "I know who I am, I know what I can accomplish, and I know what I can become." Of course as they return to the firing range the tone will quickly change. The smell of smoke and the scream, "Pull!" will bring that competitive spirit back like a shot. And at camp one thing's for sure: No one wants to get beat by their mom.

After everyone learns about the equipment and safety issues campers get out on the water to have fun and get wet.

Gail Brown is a retired teacher and school administrator.

Be Wild! L
Madtoms

Stonecat Madtom

story and illustrations
by Spike Knuth

Madtoms are small catfishes of the genus *Noturus*, which includes 27 species that occur throughout the eastern United States and Canada. Of those, nine species are found in the mid-Atlantic region; six of those species occur in Virginia. *Noturus* means "backtail," referencing the rear margin of the adipose fin being attached to the caudal (tail) fin, a trait that is not present in other catfishes. The name "madtom" was coined by a biologist (Jordan) in 1889, in describing the fish's erratic swimming behavior when startled. In Virginia they are often called "cat minnows," and are in fact netted by bait dealers and fishermen (sometimes illegally) and used for bait, especially for smallmouth bass. Additionally, some are taken to be put in home aquariums.

These catfish reach a maximum length of about 12 inches, although most barely reach four. All are scaleless and have four pairs of barbells. They also have pectoral and dorsal fin spines that are encased in a sheath containing mild venom. The rear edge of the pectoral spine is serrated or toothed. These spines can be extended and held stiffly erect and locked into position, which provides an effective deterrent to predators and anyone who handles them.

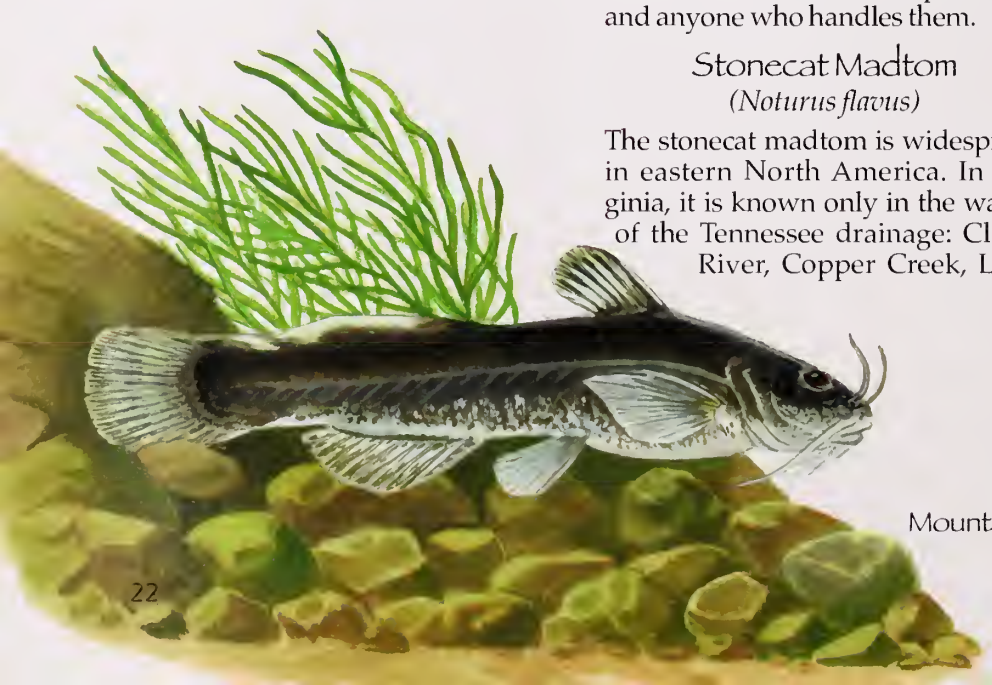
Stonecat Madtom
(Noturus flavus)

The stonecat madtom is widespread in eastern North America. In Virginia, it is known only in the waters of the Tennessee drainage: Clinch River, Copper Creek, Little River, North Fork Holston River, Big Moccasin Creek, Laurel Creek, and lower South Fork Holston River. It has also been recently found in the Big Sandy drainage.

Its head is broad and body slender and elongate. The dorsum (back or upper body) is slate-gray to olive-green, fading to yellow-olive sides and a white venter (underside). Stonecats average four to 9.5 inches in length. They occur in medium to large warm streams of moderately low gradient and favor riffles, runs, or rapids that are not too swift. Here they hide under or among rocks.

Spawning probably takes place in April and May. The male guards the eggs and broods the young at first. The stonecat is a secretive fish and feeds at night on aquatic invertebrates, immature insect larvae, mayflies, caddis flies, midge larvae, and occasionally, small fish.

Some studies show that stonecats are a good indicator of smallmouth bass abundance. It's been found that where one is abundant, the other usually is too. Stonecats are a species of special concern, although they can be common in some pockets.



Mountain Madtom

e Wild! Grow Wild!

and Other Little Known Bullheads

Yellowfin Madtom

Mountain Madtom
(Noturus eleutherus)

The mountain madtom is a small, somewhat robust fish with a flattened head, measuring two to four inches. The head and back are dark brown to yellow-brown, fading to medium brown or gray-brown on the sides, which are mottled with black-brown.

In Virginia, it is found in the North Fork Holston, Clinch, and Powell rivers, and lower Copper Creek—all of the Tennessee River drainage. Mountain madtoms inhabit the gravel, rubble, and vegetation of riffles and runs of clear and warm, medium to large streams and rivers. They spawn in June and July, usually in cavities beneath flat rubble or in gravel. Main foods include a variety of immature aquatic insects, which they feed upon primarily at night.

Mountain madtoms are probably the most abundant of the small catfish in southwestern Virginia. While it is common in favorable habitats, it is rarely abundant.

Yellowfin Madtom
(Noturus flavipinus)

In Virginia, this three to four inch madtom is found only in Copper Creek in Russell and Scott counties, the lower Powell River, Lee County, and the upper Clinch River in Russell County. The head and body are mostly pale yellow-brown to yellow-gray, with a slight pink cast and pale yellow fins.

Yellowfins live in calm, warm, clear, medium-sized streams and rivers of moderate gradient, especially in pools and backwaters. They live under cover of logs, stocks, leaf litter, rocks, debris, and undercut banks.

Spawning takes place in mid-May to mid-July in cavities beneath rubble. Like other madtoms, eggs are laid in clusters. They feed on a variety of benthic (bottom dwelling) insects.

Yellowfins were thought to be extinct in 1969, but later found to be more abundant. They are considered rare, however, and listed as threatened both federally and in Virginia.

Orangefin Madtom
(Noturus gilberti)

Orangefins are three to four inches in size. Their body is long and slim and they have a flattened, narrow head. They are mainly gray-brown dorsally with a pale whitish triangle on the upper corner of the caudal fin. The mid- and lower sides are pale gray to yellow-olive, sometimes with a pinkish cast and a white underside.

These little madtoms are generally found in small to large, moderate gradient streams in the mountains or upper Piedmont streams. They live in moderate to strong runs and riffles with large gravel, rubble, boulders, and other cover.

While their spawning habits have not been documented, conditions of species samples indicate that spawning takes place in late April through June. They feed mainly at night on immature aquatic insects such as mayflies, caddis flies, and midges.

Orangefin Madtom

Tadpole Madtom

Orangefins are native to the Roanoke drainage above Salem, and the Dan and Mayo rivers. They have been introduced to the upper James River drainage and can be found in Craig Creek and the Cowpasture River. They are uncommon to rare, and considered threatened.

Tadpole Madtom
(Noturus gyrinus)

This small, chubby madtom is tadpole-shaped with a large belly and a large and broad adipose and tail combination. Color-wise, it is uniformly brown, golden brown, or tan, and measures 2 to 4.5 inches.

The tadpole madtom resides in warm, quiet, slow-moving creeks, streams, and rivers, especially in backwaters. It is tolerant of turbid water and often favors thick vegetation over mud and sand bottoms. Here, it hides under rocks and in decaying vegetation, logs, and discarded trash.

Spawning occurs mainly in June and July, in crevices of rocks and often even in cans, jars, or other containers. They feed on crustaceans, immature aquatic insects, snails, algae, and small fishes.

Tadpole madtoms are found in all major drainages that run into the Atlantic, and in Virginia they are found in the lower Piedmont and Coastal Plain, with the exception of the Eastern Shore and Dismal Swamp. While abundant in certain areas, it is generally rare or uncommon.

Margined Madtom

Margined Madtom
(Noturus insignis)

The margined madtom is two to six inches long. The head and body is dark to medium brown, with an olive or pale yellow cast fading to sides that are medium to pale brown with an olive or yellow tint, and white undersides. The fins are edged in black or dark-brown. In some areas, margined madtoms are covered with medium to dark brown-black spots.

This madtom is found in low or moderate gradient sections of large creeks and rivers, occupying either hard or soft bottoms of pools, runs, and riffles. Spawning takes place in May and June beneath flat rocks in slow water above and below riffles. It feeds on aquatic insect larvae, with terrestrial insects and fishes taken occasionally.

Margined madtoms are our most common and widespread species in Virginia. They are found throughout the Atlantic Slope Basin and in the New River. The North Fork Holston River population is thought to have been introduced.

Two other little known larger bullheads that are found in streams and rivers are the flat bullhead and the snail bullhead.

Flat Bullhead
(Ameiurus platycephalus)

The flat bullhead is often called the "shoe head" bullhead and measures 7 to 11.5 inches in length. It's a stout bodied fish with a dark olive to medium-brown dorsum, with lower sides cream to white, mottled with olive-black.

Flat bullheads reside in the backwaters of large rivers but also in some lakes and ponds with mud, sand, and rocky bottoms. Little is known about spawning behavior in Virginia but North Carolina studies show that spawning occurs in June and July. Flat bullheads feed on aquatic invertebrates, snails, and fish.

Flat Bullhead

They range from the Blue Ridge foothills to the lower Piedmont, extending into the Coastal Plain; in particular, the Roanoke and Chowan drainages. They are common to uncommon in their range.

Snail Bullhead
(Ameiurus brunneus)

Snail bullheads measure 7 to 11.5 inches in length. The back and sides are pale olive-brown to gray-brown, mottled lightly, with white undersides.

They are believed to favor rocky portions of higher gradient streams, and occupy the pools and riffles with good current and soft bottoms. This is another fish that has not been studied and little is known of its spawning habits, which are believed to be similar to the flat bullhead. Conditions of some captured fish indicate that spawning probably takes place in May and early June. Snail bullheads feed on insect larvae, snails, minnows, filamentous algae and other aquatic animals. They are only found in lower reaches of the Dan River. □

Spike Knuth is an avid naturalist and wildlife artist. For over 30 years his artwork and writing have appeared in Virginia Wildlife. *He is a member of the Virginia Outdoor Writers Association.*

Freshwater Fishes of Virginia by R. E. Jenkins and N. M. Burkhead is a good resource for these species.

Be Wild! Live Wild! Grow Wild! is a regular feature that highlights Virginia's Wildlife Action Plan, which is designed to unite natural resources agencies, sportsmen and women, conservationists, and citizens in a common vision for the conservation of the Commonwealth's wildlife and habitats in which they live. To learn more or to become involved with this program visit: www.bewildvirginia.org.

Snail Bullhead

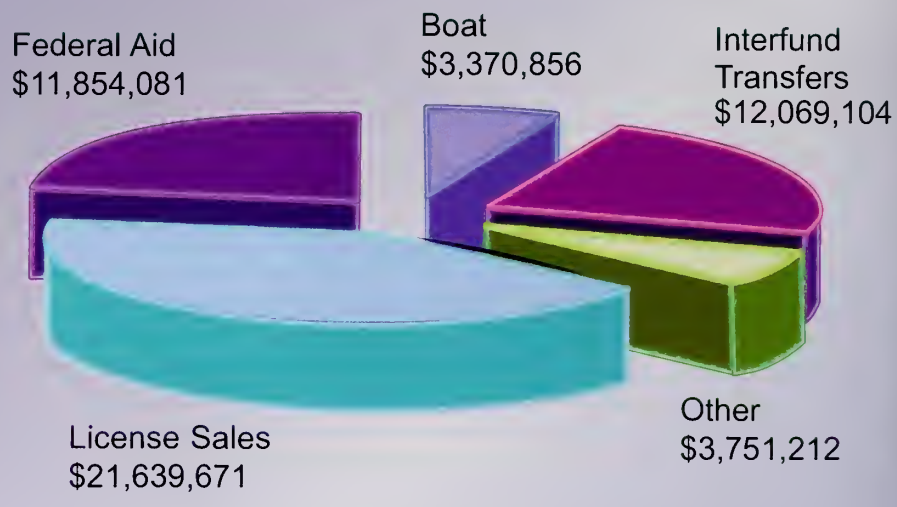
Virginia Department of

Financial Summ
(July 1, 200

Mission Statement

To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth; To provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation and to work diligently to safeguard the rights of the people to hunt, fish and harvest game as provided for in the Constitution of Virginia; To promote safety for persons and property in connection with boating, hunting and fishing; To provide educational outreach programs and materials that foster an awareness of and appreciation for Virginia's fish and wildlife resources, their habitats, and hunting, fishing, and boating opportunities.

INCOME FROM OPERATIONS, FISCAL YEAR 2009



Total Revenue from Operations: $52,684,924

License Sales: $21,639,671

Revenue from the sale of hunting, fishing, and trapping licenses is the single largest source of funding for the agency and accounts for about 41% of the Department's total revenue from operations. The Department currently sells approximately 60 types of annual licenses in addition to lifetime hunting and fishing licenses. Lifetime license dollars are deposited into a separate endowment fund, with the income and principal to only be used to administer the lifetime license program and support the Department's wildlife conservation programs.

Boat Registration and Titling: $3,370,856

With about 252,000 registered motorboats (propelled by machinery) in the Commonwealth, the funds derived from boat registration and titling are used for the agency's boating efforts of boating safety education, boat registration and titling, and boating law enforcement. Non-motorized boats (canoes, kayaks, sailboats, etc.) are not required to be registered in Virginia.

Interfund Transfers (net): $12,069,104

Through the Appropriations Act (budget bill), the Department receives revenue from the 2% Watercraft Sales and Use Tax on motorboat purchases and also a portion of the state sales tax on expenditures for hunting, fishing, and wildlife-related equipment.

Other: $3,751,212

Other income sources for the Department include *Virginia Wildlife* magazine subscriptions; receipts from the wildlife conservationist license plate series; timber sales from Department-owned lands; interest from cash balances in accounts; sales of merchandise; donations; and sales of the state migratory waterfowl stamp.

Federal Aid: $11,854,081

Federal funds come from a variety of designated funding sources, including:

The *Federal Aid in Wildlife Restoration Act* (popularly known as the Pittman-Robertson Act) funds are derived from an 11 percent federal

Department Goals

- Provide for optimum populations and diversity of wildlife species and their habitats
- Enhance opportunities for the enjoyment of wildlife, inland fish, boating, and related outdoor recreation

Game & Inland Fisheries

ry Fiscal Year 2009
June 30, 2009)

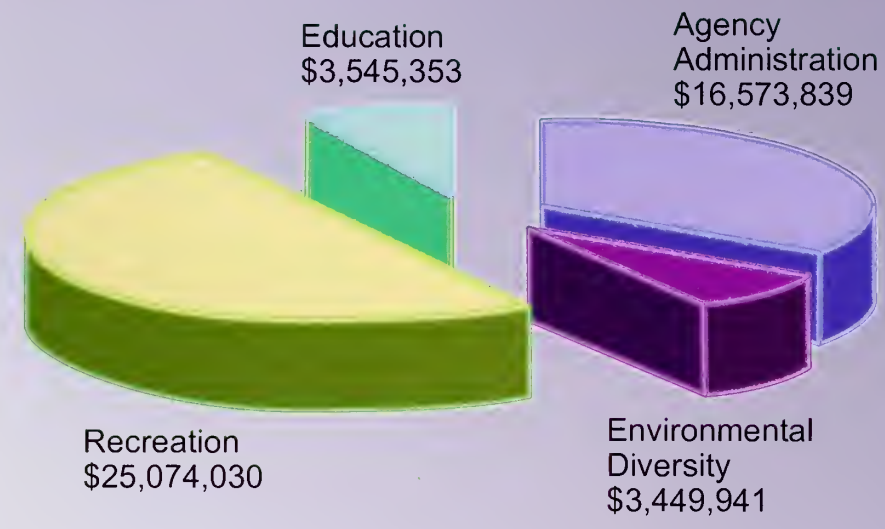
excise tax on sporting arms, ammunition, archery equipment and a 10 percent tax on handguns.

The *Federal Aid in Sport Fish Restoration Act* (commonly referred to as the Dingell-Johnson/Wallop Breaux Act) dollars are derived from federal excise tax on manufacturers of fishing tackle, duties on boats, and a motorboat fuels tax.

The *State and Tribal Wildlife Grant Program* funds are from appropriations provided through the federal budget bill and are not dedicated tax funds. The program supports states' efforts that benefit wildlife and their habitats, including species that are not hunted or fished. The amounts may vary according to the appropriation in the federal budget.

The *Recreational Boating Safety (RBS) Grant Program* is administered through the U.S. Coast Guard. The sources of money for this program are varied and include a tax on fuel used in boating and the allocation of revenues collected through amendments to the Dingell-Johnson/Wallop Breaux Act. The funds may be used to provide facilities, equipment, and supplies for boating safety education and for boating law enforcement. Acquisition, construction, and repair of public boating access sites used primarily by recreational boaters, in addition to a variety of other programs ranging from boating patrol, search and rescue, boating safety inspections and marine casualty investigations, navigation aids and supporting boat registration and titling programs are funded through this program.

OPERATIONAL EXPENDITURES, FISCAL YEAR 2009



Total Operational Expenditures: $48,643,163

Since funding sources support a range of programs, the Department uses a mission-focused budget divided into four functional areas: Recreation, Education, Environmental Diversity, and Administration.

With the exception of the Recreation Boating Safety Grant Program, federal funds are primarily designated for wildlife and fisheries management and cannot be used for law enforcement efforts.

Mission-focused, Functional Areas

Since funding sources support a range of programs, the Department uses a mission-focused budget divided into four functional areas: Recreation, Education, Environmental Diversity, and Administration.

- The *Environmental Diversity functional area* is a set of programs designed to support the mission of the agency: "To manage Virginia's wildlife and inland fish to maintain optimum populations of all species to serve the needs of the Commonwealth." This is comprised of habitat and population management work done for game species such as deer, turkeys and quail and non-game species, including birds and reptiles and endangered species.

- The *Recreation functional area* is a set of programs to support the mis-

- Improve the understanding and appreciation of the importance of wildlife, inland fish, and their habitats

- Promote safe and ethical conduct in the enjoyment of boating, hunting, fishing, wildlife viewing, and related outdoor recreation

- Improve agency funding and other resources and effectively manage all resources and operations

sion of the agency: "To provide opportunity for all to enjoy wildlife, inland fish, boating and related outdoor recreation and to work diligently to safeguard the rights of the people to hunt, fish, and harvest game as provided for in the Constitution of Virginia." Efforts supported by this category include hatcheries, hunting, fishing and wildlife watching programs, and the agency's law enforcement efforts.

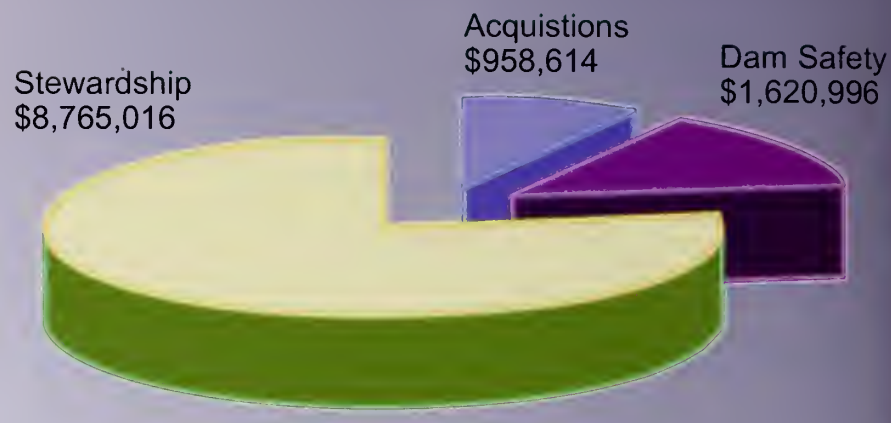
- The *Education functional area* is a set of programs to support the mission of the agency: "To promote safety for persons and property in connection with boating, hunting and fishing and to provide educational outreach programs and materials that foster an awareness of and appreciation for Virginia's fish and wildlife resources, their habitats, and hunting, fishing, and boating opportunities." This includes boating safety education, hunter education, outdoor skills education and public outreach efforts such as *Virginia Wildlife* magazine and Project WILD.

- The *Administration functional area* is a set of programs to support the goal of the agency: "To improve agency funding and other resources and the management and effectiveness of all resources and operations." This area covers Department-wide administrative activities that ensure compliance with procurement, accounting, technology and other policies, and also includes acquisition and maintenance of facilities.

Department Assets

- Over 200,000 acres of land in 37 wildlife management areas
- 37 public fishing lakes
- 215 public boating access facilities
- 47 handicapped-accessible fishing piers
- 8 fish culture stations
- Statewide birding and wildlife trail

CAPITAL EXPENDITURES, FISCAL YEAR 2009
$11,344,626



Capital Programs are long-term construction projects, infrastructure improvements, land purchases, and infrastructure maintenance. The Department classifies these expenditures into three categories: Acquisitions, Dam Safety, and Stewardship. Acquisitions include the purchase of land and other associated costs such as titling, surveying, environmental studies, and appraisals. Dam Safety is the cost associated with ensuring the Department's dams comply with federal and state safety standards. Stewardship is the cost associated with maintaining or improving the Department's infrastructure.

CAPITAL REVENUE, FISCAL YEAR 2009
$5,072,962

Capital Program Revenues are federal grants and insurance recovery payments that are directly related to a capital project. The balance of the Department's capital expenditures is funded using revenue from operations or funds from the Department's cash balance.

A Duck Hunter's Journal

by Tee Clarkson

December 18, 2008

I have found it true on more than one occasion that the best things in life are sometimes right in front of me; somehow, I just fail to recognize them. That scenario certainly played out in my duck hunting season.

My brother has had access for several years to a few shallow ponds near one of the major rivers in central Virginia's waterfowl flyway. We set up in one of the ponds a few years back and came up empty on ducks and geese, something not unusual even in the best spots. My brother hunted that pond one more time and shot one or two ducks, but nothing to really get excited about. After that, we lost interest in the spot and kept looking around elsewhere, until we had almost completely forgotten about it. That is, until my brother drove by the ponds just a couple of days before Christmas last year.

He called me immediately. "The ducks and geese are loaded in that little pond off the river!" he said. If it hadn't been Christmas Eve, we would have tried them the next morning. We both have young children and wives, however, and would prefer to live to hunt another sunrise than try to go out on Christmas morning. Reluctantly, we planned the hunt for the morning of the 26th.

The fly in the ointment of the deal was that my brother had all his in-laws in town. So if we were going hunting, his 'pass' out of the house was going to include his two brothers-in-law, neither of whom had ever been duck hunting before. Generally, I am skeptical of hunting with new people, especially new people who have never hunted waterfowl. But these were special circumstances. His brothers-in-law are nice enough guys, and since I couldn't go without my brother, I couldn't go without them either.

I felt a cautious optimism as my father and I waited for my brother's group at the gate to the property the following morning. I've learned it's never a good idea to get too excited when it comes to waterfowl hunting in Virginia. Just because the birds were there yesterday doesn't mean they will be there today. Still, maybe this time it would pan out.

We put out a substantial spread of decoys surrounding the point where my brother had seen most of the ducks and geese concentrated a few days prior. Then we tucked in behind the several bushes that lined the bank and created some make-shift blinds. We poured coffee from my thermos and spent the waning minutes before shooting time trying to explain to the brothers-in-law what they could or couldn't expect. Basically that boiled down to, "Don't do anything unless we tell you to. That includes moving, looking up, and definitely, shooting." I could tell they were wondering what the heck they had gotten themselves into, but we had a real chance at a good hunt here.

If there were any questions as to whether there were still birds in the area, the answer came shortly before shooting time. Teal buzzed us, mallards circled and landed in the decoys, and gadwalls back-pedaled within reach of our gun barrels. I could only imagine what the two newcomers were thinking as we sat and waited, and waited, and waited for the clock to turn to legal time, whispering as loudly as we could, "Don't shoot!"

Finally it arrived. The five of us stood simultaneously just minutes afterward and folded three gadwalls that had glided over at about ten yards. The shooting stayed hot for another 15 or 20 minutes, during which time we picked up a little short of a dozen ducks.

The brothers-in-law were clearly having a pretty darn good time.

We heard the first flight of geese around 8 a.m. They came on a string to the spread. No circling, flaring, or hesitancy with this batch. Of the first eight that got within range, only four left. Group after group showed up like that for an hour so that we needed just one goose to complete our limit by 9 a.m. My father hadn't been getting quite as much shooting on his end, so the rest of us unloaded and sat watching and waiting for him to fill our limit. We didn't wait long. The last group came just like the first. As they banked in over the decoys from the left, my father stood and folded the last one of the bunch. We might have killed more ducks had we stayed but the wind was dying and the sun, getting high. For once I would be home before promised.

And for the brothers-in-law, it was not a bad first day of waterfowling. I hope we didn't spoil them too good.

Journal

2009-2010 Outdoor Calendar of Events

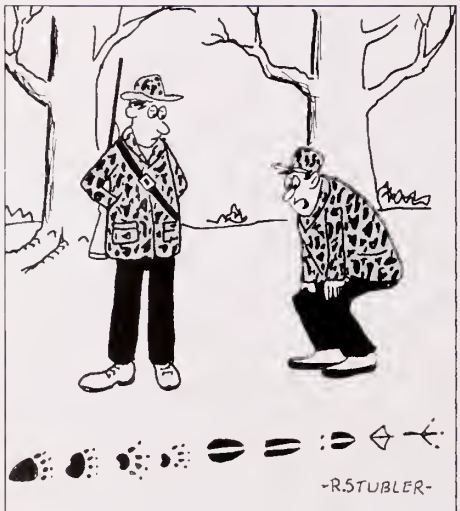
Unless otherwise noted, for current information and registration on workshops go to the "Upcoming Events" page on our Web site at www.HuntFishVA.com or call 804-367-7800.

December 4: *Turning a New Leaf,* Washington, DC, for landscaping professionals. For more information: www.ChesapeakeLandscape.org or call (443) 482-2156.

December 18–19: *Youth Deer Hunting Workshop,* Claytor Lake State Park. Ages 12 to 17. Muzzleloading firearms only are allowed.

January 14, 16, 21, 23, 26, 2010: *Learn to Use Your Digital Camera,* with Lynda Richardson at the Lewis Ginter Botanical Garden, Richmond. For more information: www.lewisginter.org or call (804) 262-9887, ext. 322.

January 30, 2010: *Winter Wildlife Festival,* Virginia Beach. For more information, contact Jeff Trollinger at jeff.trollinger@dgif.virginia.gov.



"Tell you the truth, I don't know what it is."

Christmas Bird Count

by Jeff Trollinger

The Christmas Bird Count (CBC) is an annual bird census performed throughout the Americas. It is the world's longest-running bird survey, having started on Christmas Day 1900 with 28 observers. Designed around a 15-mile diameter "count circle," volunteers count all birds that they see within their assigned portion of the circle on one designated day, which always falls between 14 December and 5 January. Some volunteers begin as early as just after midnight to count owls, which can be difficult to find during daylight. Typically, at least ten volunteers count a circle, but the number can reach into the hundreds. Here in Virginia, about 42 circles typically are surveyed each year; not all circles are counted every year. These circles cover most regions of the state, but are fewest in the Piedmont. Volunteer turnout is especially heavy in Northern Virginia and in Shenandoah National Park.

CBC data are used by researchers to study bird populations across time, both in numbers and distribution. They have been compared with other data sets to determine the effectiveness of different survey types. CBC data also have been used to investigate community dynamics of species, such as winter bird diversity in different areas or fluctuations in populations paired to weather conditions. The data collected by volunteers every year are invaluable in that they contribute to the longest running and most geographically broad data set in ornithology. This allows researchers to monitor population trends and distribution over long time periods, across vast distances.

If you'd like to participate in one of Virginia's Christmas Bird Counts, go to the Audubon CBC Web site at http://www.audubon.org/Bird/cbc/ and get involved!

by Beth Hester

Flowers and Herbs of Early America

by Lawrence D. Griffith, with color photographs by Barbara Temple Lombardi
2008, The Colonial Williamsburg Foundation / Yale University Press
www.colonialwilliamsburg.org

I was nine years old when I made my first trip to Colonial Williamsburg. To this day I recall the mixed scents of bayberry soap, hand-dipped candles, neatly trimmed boxwood hedges, and assorted plants and flowers that were so in evidence that hot July morning. As I slowly trolled each side lane, taking everything in, I felt transported, enchanted, and also strangely transformed.

How on earth, I wondered, could anyone manage to reconstruct and restore large, historic areas? How could a scientist find some old, rusty fixture and decide it belonged to a window shutter, or a horse-drawn carriage? And ... importantly, how could anyone know what plants the early colonists cultivated, and what their gardens contained?

Flowers and Herbs of Early America, penned by plant historian and master gardener Lawrence Griffith, curator of plants for Colonial Williamsburg, begins to answer some of these questions.

It is the literary manifestation of Griffith's years' long exploration into the flowers and herbs known to have been in Williamsburg and coastal Virginia during the 18th century.

Combining scholarship with hands-on spadework, Griffith painstakingly sought in his own words "to grow and identify viable plants that were accurate to the colonial period ... I concentrated on flowers and herbs that when used in a mixed palette, would prove amenable to being sown directly into garden flower beds, show promise in germinating early, provide extended bloom, and display a propensity to produce and abundantly scatter seed, thereby perpetuating themselves and obviating a need for a greenhouse."

Divided into two sections—Flowers and Herbs—each of the fifty-eight engaging plant narratives documents the species of plant, and its uses. For the colonists, flowers and herbs were utilized not only as a direct source of food, but also for their varied medicinal qualities such as that of purple coneflower. Flowers like sunflower and ragged robin were used to attract wildlife, and a good many other plants and herbs such as calendula, rosemary, and sage were used to season and enhance the flavor of both farmed meat and wild game.

The entries are accompanied by lovely period engravings and woodcuts, Barbara Lombardi's majestic photographs, and helpful sidebar information on the plant's habits, natural range, and tips for cultivation. This important book is a must-have for any gardener or lover of Virginia history. It is both an aesthetic pleasure, and a historic treasure. □

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From the Editor:

Thanks to the many employees of the Department who volunteered their time and expertise to review articles during 2009. Your timely assistance helped to keep the magazine on track each month and is sincerely appreciated!

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VIRGINIA WILDLIFE
OUTDOOR CATALOG

2009
Limited Edition
Virginia Wildlife
Collector's Knife

Our 2009 Collector's knife has once again been customized by Buck Knives and features a wild turkey in full strut. The elegant, solid cherry box features a forest scene. Knives and boxes, made in USA.

Item # VW-409 $85.00 each (plus $7.25 S&H)

2008
Virginia Wildlife
Collector's Knife

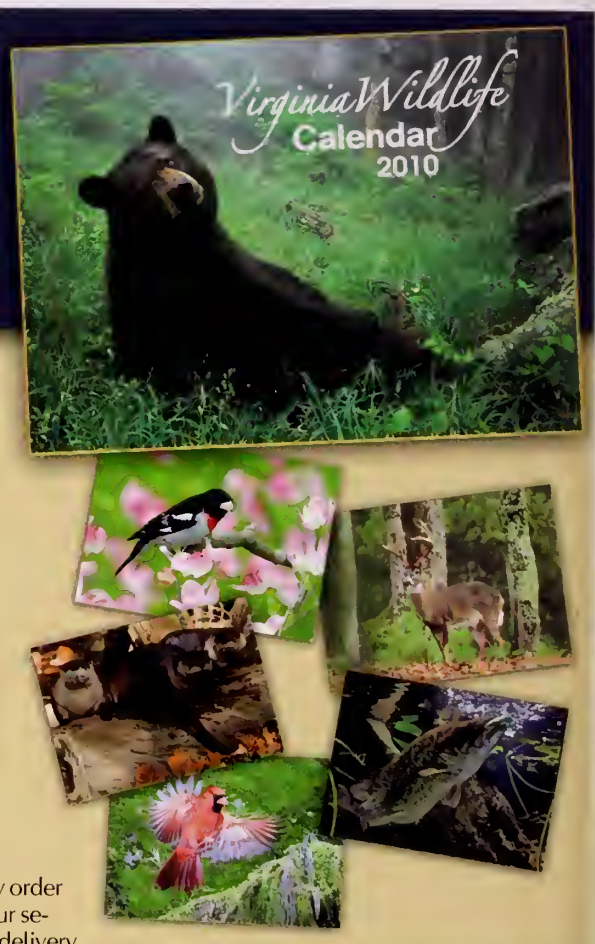
Produced by Buck Knives, this knife features a red-tailed hawk engraving, augmented by a natural woodgrain handle and gold lettering. A distinctive, solid cherry box features birds of prey.

Item # VW-408 $90.00 each (plus $7.25 S&H)

Find Game is an interactive Web-based map viewer designed by the Virginia Department of Game and Inland Fisheries to provide better and more current information about hunting land location and access in Virginia. *Find Game* allows users to map hunting areas by location and/or by game species, along with hunting quality by species, land manager contact information, site description, facilities available, access information and associated Web links. To learn more about *Find Game*, visit **www.HuntFishVA.com/hunting/findgame.**

The 2010 *Virginia Wildlife* Calendar

Is Now Available



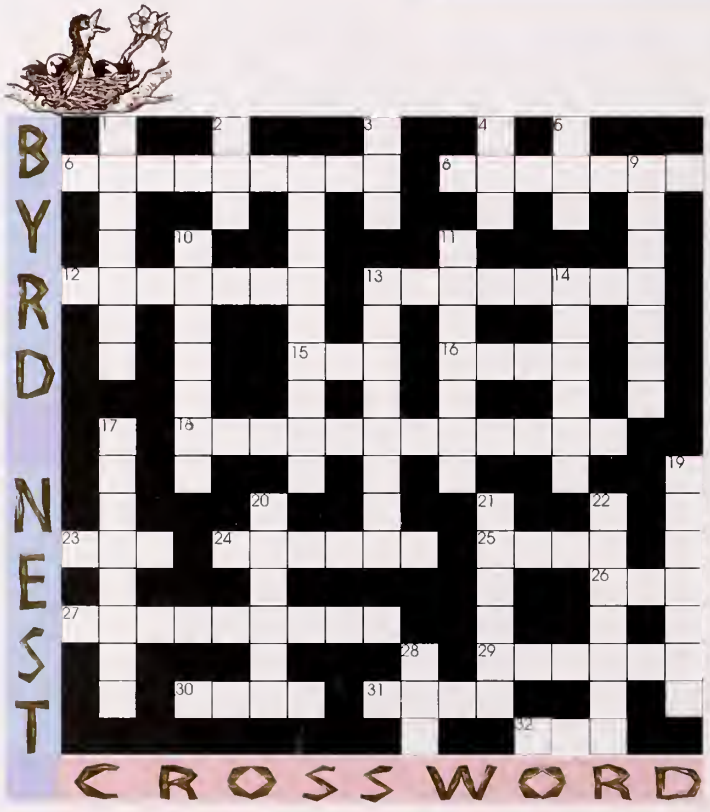
It's once again time to purchase a Virginia Wildlife calendar—a thoughtful holiday gift that's still a bargain at **$10 each.**

As always, the calendar features spectacular photography and useful information to the outdoors enthusiast, including wildlife behavior, hunting seasons, favorable hunting and fishing times, state fish records, and more!

Quantities Are Limited, So Order Yours Today.

Make your check payable to "Treasurer of Virginia" and send to:
Virginia Wildlife Calendar,
P.O. Box 11104,
Richmond, Virginia 23230-1104.

To pay by VISA or MasterCard, you may order online at **www.HuntFishVA.com** on our secure site. Please allow 4 to 6 weeks for delivery.



by Marika Byrd

ACROSS

6. Loggerhead (2 words)
8. Dead, rotten flesh
12. Leaves, leafage
13. Thrush family bird
15. Dove soft cry
16. Type of tide
18. Piedmont area river
23. Kill a deer
24. Gun discharge tube
25. Kayak maneuver–360 degrees
26. Gnaw or chew
27. Dec. holiday cactus
29. Winter boat hazard (2 words)
30. Animal ID ring
31. Rail family waterfowl
32. Tree rings reveal it

DOWN

1. Poisonous tree; carrot family herb
2. Pelt, skin
3. Oyster grounds
4. Fish color marking
5. Wildlife pictures
7. Star watcher gear
9. Outside
10. Animal gut, intestines
11. Afire, ablaze
13. Water mammal nostril
14. Shell force into target
17. Brown _____; mockingbird family
19. _____ Meadows wildlife sanctuary
20. Batten down boat
21. Conservation officer nab
22. Small shad-like fish
28. Constrictor

Photo Tips

by Lynda Richardson

Happy Holiday Gift Ideas

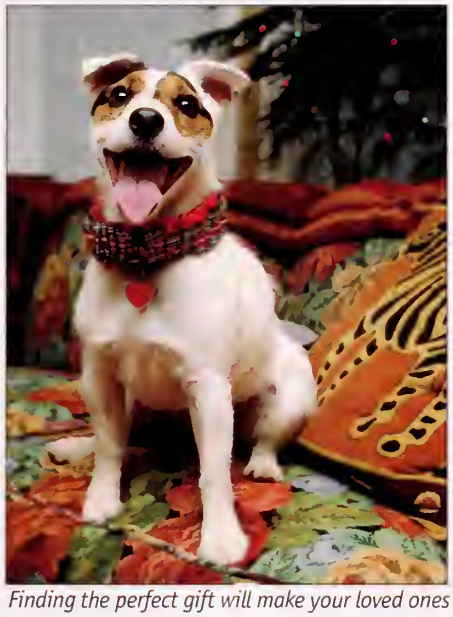
The month of giving is upon us and with that comes the frantic search for just the right presents for friends and family. If one of your gift recipients is a photographer, I have a few ideas you might want to consider.

Photographers who use digital SLR cameras usually need something to clean their camera's sensors. For this I would recommend the Lens Pen Combo with a Giottos Rocket Air Blower for $36.95. I would also recommend buying it through Art Morris, as he includes a detailed instruction sheet on how to properly clean your sensor. For more information, go to Art Morris's Web site at www.birdsasart.com or directly to https://store.birdsasart.com/shop/item.aspx?itemid=250.

After teaching workshops this past summer and fall, several older students mentioned having trouble getting down to ground level because of achy knees and backs. What I suggested was that they try a right angle finder. My right angle finder (well, I am older) is the Canon Right Angle Finder C for $179.95. The Angle Finder C lets you adjust the viewing angle while also providing a 1.25x to 2.5x changeable magnification. Provided with built-in variable diopter correction, it is also supplied with Finder Adapters ED-C and ED-D to fit any Canon EOS camera. For more information, call (800) 622-4987 or go to B & H's Web site at http://www.bhphotovideo.com/c/search?Ntt=canon+right+angle+finder&N=0&InitialSearch=yes.

The Pro Optic Right Angle Finder II is compatible with most film and digital SLR cameras and features diopter correction with a range of +/-4, 1x and 2.5x dual magnification settings and full 360-degree viewfinder rotation. List Price: $69. Contact Adorama, (800) 223-2500, www.adorama.com.

A photographer can always use some extra LCD screen protectors.



Finding the perfect gift will make your loved ones happy. FLASH wasn't into camera gear but loved his new collar. © *Lynda Richardson*

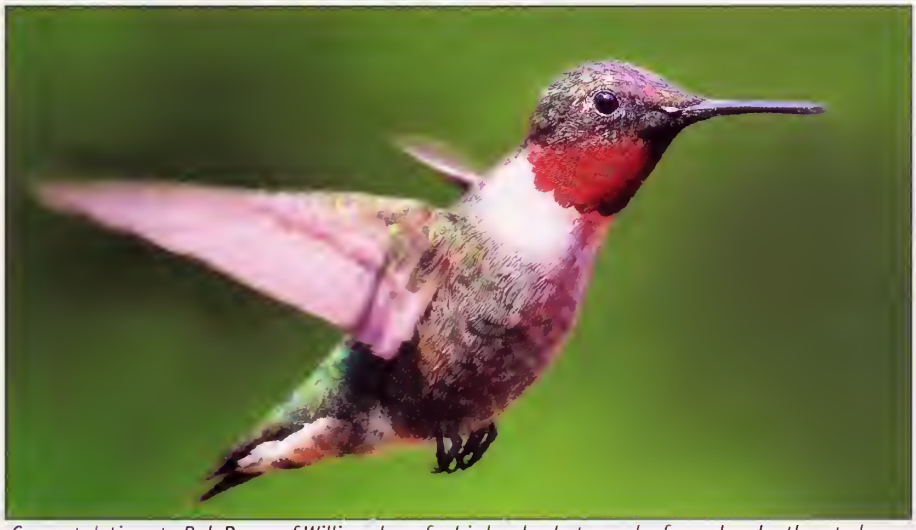
Check out Hoodman's, (800) 818-3946, where a package of 12 sells for $10.99. Different sizes are available, www.hoodmanusa.com/products.asp?dept=1058.

You also might consider giving the gift of education. There are hundreds of wonderful photography workshops out there that your favorite photographer might enjoy. In 2010, I will be teaching a wide variety of workshops throughout the state, starting in Richmond at Lewis Ginter Botanical Garden, www.lewisginter.org (look under Adult Education), and the University of Richmond (look under the School of Continuing Studies), http://scs.richmond.edu/personal/film-photo/courses.html. You can also find out more information about my workshops at www.lyndarichardson.com.

Now you can scratch at least one person off your list! Happy Holidays and Happy Shooting!!!

You are invited to submit one to five of your best photographs to "Image of the Month," Virginia Wildlife Magazine, P.O. Box 11104, 4010 West Broad Street, Richmond, VA 23230-1104. Send original slides, super high-quality prints, or high-res jpeg, tiff, or raw files on a disk and include a self-addressed, stamped envelope or other shipping method for return. Also, please include any pertinent information regarding how and where you captured the image and what camera and settings you used, along with your phone number. We look forward to seeing and sharing your work with our readers.

Image of the Month



Congratulations to Bob Peace of Williamsburg for his lovely photograph of a male ruby-throated hummingbird photographed from his backyard deck. Canon 40D digital SLR camera, 400mm lens, 1.4X extender, ISO 1600, 1/2700th, f10.0. As colorful and sparkly as a Christmas ornament!

Dining In

by Ken and Maria Perrotte

Get Wild with Holiday Hors D'oeuvres

Our holiday parties have earned a reputation for being a little wild. People come to expect it. There'll usually be platters with various hors d'oeuvres created with an assortment of wild game, birds and fish.

We like to enjoy the party, too, so we want to keep it simple with a combination of do-ahead and easy preparation hors d'oeuvres. Here are a few of the easiest and tastiest.

Cheesy Venison Sausage Dip

(How easy is this?)

- 1 lb Velveeta
- 1 lb ground venison sausage
- 1 can Rotel tomatoes

Cook and crumble sausage in frying pan and set aside. Cut cheese product into 1-2 inch squares, melt in microwave. Stir in sausage and tomatoes and heat for another couple of minutes until hot. Serve with tortilla chips. This simple recipe may be prepared ahead of time up to point of melting cheese. Of course, you will have had to have made some nicely spiced venison sausage at some point prior to this or had your venison processor make some for you. Many do. Sausage making is another art unto itself, one we highly recommend learning, but that's another wild game lesson.

Venison & Mushroom Empanadas

For the pastry:

- 1½ cups flour, plus flour for dusting
- 10 tablespoons butter
- 8 ounces cream cheese

For the filling:

- 2½ tablespoons olive oil
- ¾ pound ground or minced venison
- 1½ cups finely chopped portabella or shiitake mushrooms
- 2 garlic minced cloves
- ¾ cup finely chopped onions
- 1 teaspoon Herbs de Provence (typically a thyme, savory, marjoram, rosemary, fennel and sage blend that's heavy on thyme and marjoram)
- 1 tablespoon-plus brandy
- 5 teaspoons cream
- Salt and pepper to taste

Cut butter and cream cheese into 1-inch pieces. Place in food processor with flour and process until dough is mixed and forms into a ball. Refrigerate for about 15 or 20 minutes while making filling. If preferred, commercial frozen pastry dough may be used.

Heat oil over medium flame in skillet and add meat, onion and garlic. Cook for about a minute and add mushrooms. Cook until meat is browned, vegetables are soft. Add brandy and herbs and cook for about a minute. Add cream and salt and pepper to taste. Remove from heat.

Roll out dough on floured cutting board to a thickness of about ⅛ inch or slightly less. Cut out three ½ inch circles. A large glass works well for this. Place about ½ to ⅔ tablespoon filling onto each dough circle and fold over, making turnovers. Press together with tines of a fork and prick the top of the turnover with the fork. At this point, the turnovers may be frozen for up to 1 month in a freezer bag. Bake on parchment paper lined cookie sheet at 400° for about 15 minutes (20 if frozen) or until golden brown.

Venison London Broil Roll-Ups

- Venison bottom round roast
- Montreal steak seasoning
- Fresh asparagus spears
- 4 teaspoons Mayonnaise
- 4 teaspoons Creole or spicy mustard
- 1 teaspoon Horseradish

Season venison bottom round with Montreal steak seasoning. Roast in oven at 325° until medium rare to medium. Cool, refrigerate and when chilled, slice as thin as possible. Blanch asparagus in boiling water for one to two minutes. Cool and cut in half or to fit meat slices. Mix mayonnaise, mustard and horseradish. (The amount of sauce can be adjusted based on size of roast, keeping proportions the same.) Spread each slice with sauce and wrap around asparagus spear. Meat, asparagus, and sauce may be prepared a day ahead, refrigerated separately and assembled just before serving.

Smoked Trout Spread

- Rainbow trout whole, cleaned
- Lemon pepper seasoning
- Mayonnaise
- Old Bay seasoning
- Herbs for garnish, optional

Season trout with lemon pepper and smoke or grill. When cool, pick meat off bones and combine with enough mayonnaise to form a spreadable consistency. Season to taste with Old Bay. Garnish with parsley or dill. Serve with crackers. May be made a day ahead and stored in airtight container in refrigerator.

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